

Some Observations on the Fauna of the Maldivé Islands

Part VII—BUTTERFLIES

BY

W. W. A. PHILLIPS

[*Continued from Vol. 55 (3) : 492*]

This short paper is the outcome of two visits paid by the author and his wife to the Maldivé Islands, the first to North Malé Atoll from the end of November 1956 to early February 1957 and the second to Addu Atoll in the extreme south of the archipelago from the end of May 1958 to the beginning of April 1959. On both these visits we were accompanied by a retired Colombo Museum collector and taxidermist, William Perera, who always carried a butterfly-net whenever we went out and who, when not otherwise engaged, devoted much of his time to collecting specimens of the local lepidoptera and other insects. The main objective of our activities was a study of the vertebrate fauna of the archipelago (see Parts I-V of this series, Vol. 55) so the collection of lepidoptera and insects was, unavoidably, of secondary importance. Even so, numerous specimens were collected and some notes were made.

The first collection, from North Malé Atoll, was sent to the British Museum (Natural History) on our return to England in 1957, but the specimens collected in Addu Atoll were forwarded by post, through the Field Post Office on Gan, direct to the Museum, from time to time as the specimens were collected, for the hot and humid climatic conditions that prevail in Addu Atoll made it inadvisable to keep them longer than was necessary in such a climate.

The specimens were identified through the kindness of Mr. N. D. Riley, former Keeper of Entomology at the Museum, and Mr. T. G. Howarth and I am now able to give an annotated list of the butterflies collected. I have added a few brief remarks under each species where necessary. My grateful thanks are due to Mr. Riley and to Mr. Howarth for their assistance.

It is interesting to note that, while 25 species were collected in North Malé Atoll (approx. 73° 30' E. 4° 30' N., near the centre of the archipelago) and several others were seen but evaded capture, a more prolonged and thorough search in Addu Atoll (the southernmost atoll of

the group, lying some 30 miles south of the Equator) revealed only 7 species in that atoll. This fact tends to confirm the belief that the butterfly fauna of the Maldives decreases rapidly as one proceeds southwards, many more species and many more individuals being found in the northern atolls than in the southern.

So closely are the Maldivian butterflies related to those of south India and Ceylon¹ that it has proved impossible to differentiate between them, thus indicating (as isolation has so far failed to evolve any new forms) that the influx of butterflies into the Maldives is of comparatively recent origin and that all the species now found in the Maldives have originated either in south India or in Ceylon. It seems very probable, if not certain, that the majority of them owe their fortuitous presence in the Maldives to the winds and gales of the NE. Monsoon which have assisted their passage across the intervening seas. Some of them, may, however, have moved southwards, from atoll to atoll, through the Laccadives into the Maldives and on southwards to Addu Atoll.

That some species do, in fact, fly the seas that divide the Maldives from Ceylon, even when the winds are light, is confirmed by the sighting of a large, strong-flying Papilionid (probably *Atrophaneura* sp.) flying westwards close over the seas at 15.55 hrs. in the afternoon of 28 November 1956 when our vessel, the *Max Arlt*, was still some 200 miles east of Malé, the nearest land. Other swallow-tails were sighted, later in the visit, flying strongly over the lagoons, from island to island.

For a description of the Maldivian Archipelago reference should be made to the first paper of this series.

ANNOTATED CHECKLIST OF MALDIVIAN BUTTERFLIES, LEPIDOPTERA, RHOPALOCERA

Family: SATYRIDAE

3 species taken in North Malé Atoll but the family is not represented in Addu Atoll. One species, *Culapa mineus polydecta*, taken by Gardner, was not seen by me.

Melanitis leda ismene C. : The Common Evening Brown

Moderately plentiful in North Malé Atoll (especially in Malé) but absent from Addu. Frequent in gardens and compounds in the evenings. Females appear to be more plentiful than males; of 14 of the dry season form, 4 were males and 10 were females, but of the wet season form 2 were males and only one a female.

¹ All the species and subspecies included in the list occur in south India and Ceylon.—Eds.

Orsotriaena medus mandata M. : The Nigger

Very plentiful in North Malé Atoll but absent from Addu. A common species amongst the scrub and lush vegetation around the swamps on Hulule and Willingilli Islands but rare on Malé Island. Males greatly outnumber females.

Culapa (Mycalesis) visala subdita M. : The Tamil Bush-Brown

Rare. 2 males, only, were taken on Malé. Not seen in Addu.

Family: DANAIDAE

2 species were taken in North Malé Atoll, one of which was also found in Addu. One species, *Euploea sylvester montana*, recorded by Gardner, was not met with by me.

Danaus chrysippus chrysippus L. : The Plain Tiger

Widespread but rather scarce. A male and 4 females were taken in North Malé and a further 12 in Addu Atoll.

Danaus limniace leopardus B. (= *mutina* F.) : The Blue Tiger

Rare. A single female was taken in North Malé Atoll, possibly a wind-driven wanderer from south India.

Family: NYMPHALIDAE

5 species were taken in North Malé Atoll, 3 of which were common to that atoll and to Addu. At least one other species was seen but evaded capture in Malé.

Acraea (Telchinia) violae F. : The Tawny Coster

Rare. 2 females were taken in open grassland on Hulule Island, close to Malé, in North Malé Atoll. Not found in Addu.

Vanessa cardui L.: The Painted Lady

3 females, all rather worn, were taken in North Malé Atoll but, during September and October (1958) many fresh specimens were observed in the grassy areas of Gan, in Addu Atoll. The species appeared to be widespread in the Maldives and to be moderately plentiful at certain times of the year.

Hypolimnas misippus L. : The Danaid Eggfly

Rather uncommon in North Malé Atoll but more plentiful in Addu Atoll. Males are considerably more plentiful than females.

Precis orithya ocyale H. (= *swinhoei* B.) : The Blue Pansy

One of the commonest butterflies in the Maldivian Islands. 15 males and 14 females of the dry season form were taken in North Malé Atoll,

but only 2 males of the wet season form. In Addu, where it is, by far, the most attractive and plentiful of all the butterflies in that atoll, over 50 perfect insects were taken and many others were seen throughout the greater part of the year. They favoured the sandy, short-grass areas.

Precis hierta hierta F. : The Yellow Pansy

9 freshly emerged males and 8 females were taken in North Malé Atoll during January (1957) but the species was not met with in Addu. In North Malé Atoll it is evidently a resident and is moderately plentiful at times. It favours the same areas as the last species.

Family : PAPILIONIDAE

Only 2 species were taken in North Malé Atoll, a single specimen of one of them being also taken in Addu. A third species (probably **Papilio polytes**) was seen on the wing but evaded capture in North Malé. It seems very probable that all the individuals of this strong-flying family that appear in the Maldives have been blown over from the coasts of south India and Ceylon by the NE. Monsoon winds, vide the one seen during our voyage to Malé flying strongly some 200 miles to the east of the archipelago.

Atrophaneura (Polydorus) hector L. : The Crimson Rose

6 males were taken in North Malé Atoll and a single one in Addu ; no female was seen. This species appears to be an immigrant to the Maldives ; several were seen flying low and strongly over the waters of the lagoons and arriving from over the seas.

Atrophaneura (Polydorus) aristolochiae aristolochiae F. : The Common Rose

Rare. Probably an immigrant from south India. A single female was taken in North Malé Atoll ; the species was not observed in Addu.

Family : PIERIDAE

Represented by 5 species in North Malé Atoll but by only a single species in Addu. In addition to the 5 species taken in North Malé Atoll, a further species (probably **Hebomoia glaucippe** L.) was seen but it evaded capture.

Appias albina darada Fd. : The Common Albatross

Rare. A single male was taken in North Malé Atoll ; not observed in Addu Atoll.

Eurema brigitta rubella W. : The Small Grass Yellow

Scarce. 3 males and a female were taken in North Malé Atoll ; not met with in Addu.

Eurema hecabe simulata M. : The Common Grass Yellow

Widespread and plentiful throughout most of the year. While only 7 females were taken in North Malé Atoll, this species was common amongst the long grass on Gan Island, Addu Atoll. Many newly emerged specimens were taken.

Catopsilia pomona pomona F. : The Lemon Emigrant

Frequently met with amongst the bush-scrub on Hulule Island, close to Malé, in North Malé Atoll. 3 Males and 3 females were taken. Not met with in Addu Atoll.

Catopsilia pyranthe minna H. : The Mottled Emigrant

Plentiful in North Malé Atoll where 10 males and 53 females of the dry season form, and a single male and 4 females of the wet season form were taken. Females were far more numerous than males. Not met with in Addu Atoll.

Family : LYCAENIDAE

Well represented by 7 species in North Malé Atoll but by only 2 in Addu Atoll. Most species are very local in their distribution and tend to remain close to the plants on which their caterpillars feed.

Zizeeria knysna karsandra M. : The Dark Grass Blue

Moderately plentiful around the low, creeping *Lippia nodiflora* Rich. that covers the lawns and playing-fields, in the place of grass, in Malé, in North Malé Atoll. 8 males and 7 females were collected. Absent from Addu Atoll.

Zizina (Zizeeria) otis indica Mur. (=devata But.) : The Lesser Grass Blue

Abundant around the low, creeping *Lippia nodiflora* Rich. patches on Malé Island, in North Malé Atoll, but absent from Addu. Generally in association with the last species.

Zizula hylax F. (=gaika Tri.) : The Tiny Grass Blue

Moderately plentiful, in association with the last two species, around the low, creeping *Lippia nodiflora* Rich. areas in Malé, North Malé Atoll, but absent from Addu Atoll. 4 males and 8 females were taken.

Freyeria putli Koll. (=Zizeeria trochilus putli Koll.) : The Grass Jewel

A single male and 3 females were taken in North Malé Atoll. Appears to be an uncommon species. Not met with in Addu Atoll.

Lampides boeticus L. : The Pea Blue

A widespread and moderately plentiful species in North Malé Atoll. 2 specimens were taken, also, in Addu Atoll where it is much less common.

Euchrysops cnejus F. : The Gram Blue

Widespread and moderately common in North Malé Atoll and also in Addu Atoll where it is generally found in association with low, creeping plants of the pea family growing in matted patches on the sandy foreshore on Gan Island.

Spalgis epius Wd. : The Apefly

2 males and 7 females were taken around bushes in gardens and compounds in Malé, North Malé Atoll, where it appears to be resident in small numbers. Not met with in Addu Atoll.

Family: HESPERIIDAE

Only one species was taken in the Maldives but another species was seen on the wing (but evaded capture) in North Malé Atoll. The single species is widespread and plentiful.

Borbo cinnara Wall. (= *colaca* M.) : Wallace's Swift or Skipper

Widespread and moderately plentiful. Although only 3 males were taken in North Malé Atoll, it was a common species amongst the grass and rank vegetation in Addu Atoll during the greater part of the year.

REFERENCES

- PHILLIPS, W. W. A. (1958) : Some Observations on the Fauna of the Maldivian Islands. Pt. I—Introduction. *J. Bombay nat. Hist. Soc.* 55 (1) : 1-3.
- WOODHOUSE, L. G. O. (1949) : The Butterfly Fauna of Ceylon. 2nd. Ed. Colombo.